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EXAMINER

TRAN, THAI Q

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,971

Applicant(s)

GREEN, DAVID

Examiner

Thai Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-138 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-138 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1. 6) ☐ Other: _____

DETAILED ACTION

1. MPEP section 1410.01 states:

Where no assignee exists, applicant should affirmatively state that fact. If the file record is silent as to the existence of an assignee, it will be presumed that an assignee does exist. This presumption should be set forth by the examiner in the first Office action altering applicant to the requirement. It should be noted that the mere filing of a small entity statement is no way relieves applicant of the requirement to affirmatively state that no assignee exists.

2. This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP section 1410.01.

A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office Action.

Response to Amendment

3. The preliminary amendment filed Dec. 06, 001 does not comply with 37 CFR 1.73(b)(2).

All subject matter being added to **an original patent claim must be underlined.**

All subject matter being deleted from **an original patent claim must be placed between brackets.** See 37 CFR 1.172(b)(2) and (d). Subject matter being added to a **new claim** requires **rewriting (and underlining) of the entire new claim.** Correction is required.

Original Patent

4. The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Rejections - 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3-5, 7-8, 10-15, 17-27, 29-33, 36-37, 40-45, 47-53, 55-60, 62-71, 73-79, 81-93, 95-105, 108, 112-119, 121-127, and 129-138 are rejected under 35 U.S.C. 102(e) as being anticipated by Gurner et al ('537).

Regarding claim 1, Gurner et al discloses a system (Fig. 1) for video production, comprising a source (source 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, and col. 8, lines 27-42) of prerecorded video and audio signals, a video and audio mixer (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 27-42) for combining the prerecorded and user supplied signals to provide combined video and audio outputs, a production monitor (video monitor 18 and speaker 36 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 43-48) connected to the mixer to display to the user the mixed signals, and a storage or reproducing device (media recorder 20 of Fig. 20, col. 5, lines 51-59 and col. 8, lines 43-48) receiving a mixed video signal output from the mixer, wherein the prerecorded video signals from the prerecorded storage medium have a video signal content prekeyed with a keying signal to indicate areas within the prerecorded video signal to be replaced by the user supplied video signals, the mixer being operative to recognize the keying signal and substitute the user supplied video

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signal for those portions of said prerecorded video including said keying signal, and the mixer being operative to convert signals from the prompting channel into production control signals (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 3, Gurner et al discloses a recording medium (source 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, col. 8, lines 27-42, col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67) carrying a prerecorded video signal, prekeyed to define background of images defined by said video signal, which video signal, on playback by a user of the recording medium in apparatus configured to recognize the prekeyed background areas, will generate a signal into which may be inserted, at least in those background areas, a local signal provided by the user.

Regarding claim 4, Gurner et al discloses wherein the video signal prerecorded on the medium is predistorted by enhancing the brightness of at least the lowlights of the prerecorded signal outside said background areas while maintaining the background areas at or below black level (col. 10, lines 5-24).

Regarding claim 5, Gurner et al discloses wherein the recording medium further carrier at least one audio channel (col. 8, lines 27-42), and at least one prompting channel including data translatable into instruction for control of the user provided video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 7, Gurner et al discloses a system a system (Fig. 1) for generating video signals comprising prerecorded video signal overlaid on user provided video signals, comprising a recording medium (source 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, col. 8, lines 27-42,

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and col. 11, lines 10-19) carrying a prerecorded video signal, prekeyed to define background of images defined by said video signal, which video signal, on playback by a user of the recording medium in apparatus configured to recognize the prekeyed background areas, will generate a signal into which may be inserted, at least in those background areas, a local signal (a video camera 14 of Fig. 1, col. 5, lines 51-59) provided by the user, the video signal prerecorded on the medium being predistorted by enhancing the brightness of at least the lowlights of the prerecorded signal outside said background areas while maintaining the background areas at or below black level (col. 10, lines 5-24), and a mixer (mixer 16 of Fig. 1, col. 5, lines 51-59) receiving video signals generated by playback of video signals from said recording medium and video signals from a user provided source, the mixer including means (col. 10, lines 5-24) for enhancing the brightness of at least the lowlights of the user provided signal to a similar degree as the lowlight enhancement of the prerecorded signal, and a luminance keyer (mixer 16 of Fig. 1, col. 5, lines 51-59) receiving said prerecorded signal and said lowlight enhanced user provided signal to produce an overlaid video signal in which the user signal is overlaid on the keyed portions of the prerecorded signal, and means (col. 10, lines 5-24) for restoring the lowlights of the overlaid video signal to their original levels to provide an output signal.

Regarding claim 8, Gurner et al discloses an apparatus (Fig. 1) configured to combine video signals from a plurality of video sources, comprising an input (source 12 video camera 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 8, lines 27-42) configured to receive a first video

signal from a pre-recorded video source and configured to receive a second video signal from a second video source, the first video signal defining a foreground and including pre-keyed background portions; a mixer (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 27-42) coupled with the input and configured to replace the identified pre-keyed background portions of the first video source with the second video signal to generate a synchronized video signal; and an output (video monitor 18 and speaker 36 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 43-48) coupled with the mixer and configured to provide the synchronized video signal to an output device.

Regarding claim 10, Gurner et al discloses the claimed wherein the second video source comprises a camera for capturing video images (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 11, Gurner et al discloses the claimed wherein the second video signal is a live video signal from the camera for capturing video images (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 12, Gurner et al discloses the claimed wherein the mixer further comprises a switcher (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19) configured to detect the pre-keyed background portions of the first video signal and configured to generate a combined video signal from non-keyed portions of the first video signal and the second video signal.

Regarding claim 13, Gurner et al discloses wherein the mixer further comprises a brightness enhancement circuit configured to enhance a brightness level of lowlights in the second video signal (col. 10, lines 5-24).

Regarding claim 14, Gurner et al discloses the claimed wherein the first video signal comprises a prompting channel (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 15, Gurner et al discloses the claimed wherein the prompting channel includes prompting signals (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 17, Gurner et al disclosed the claimed wherein the mixer extracts the control signals form the prompting channel for controlling an external device coupled with the mixer (col. 9, line 14 to col. 10, line 24).

Regarding claim 18, Gurner et al discloses the claimed wherein the external device is the second video source (col. 9, line 14 to col. 10, line 24).

Regarding claim 19, Gurner et al discloses the claimed wherein the mixer further comprises a time base control unit (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67) configured to receive the first video signal and the second video signal and configured to synchronize the first video signal and the second video signal.

Regarding claim 20, Gurner et al discloses the claimed wherein the output device comprises one from a group comprising a videotape, a video disk, a DVD, a Compact Disc, an optical storage medium, a solid state storage medium, and a magnetic storage medium (col. 7, lines 50-52).

Regarding claim 21, Gurner et al discloses the claimed wherein the output device comprises one from a group comprising a television and a video monitor (col. 7, lines 26-32).

Regarding claim 22, Gurner et al discloses the claimed wherein the first video signal comprises one from a group comprising a composite video signal, an S-video signal, a digital video signal, and an optical digital video signal (col. 6, lines 50-58).

Regarding claim 23, Gurner et al discloses the claimed wherein the pre-keyed portions comprise one from a group comprising chroma-key portions and luminance key portions (col. 6, lines 6-17).

Regarding claim 24, Gurner et al discloses the claimed wherein the mixer is further configured to identify the pre-keyed background portions of the first video signal prior to replacement of the pre-keyed background portions (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 25, Gurner et al discloses a method (Fig. 1) for producing a combined video signal from a plurality of video signals from a plurality of video sources, comprising receiving (source 12 video camera 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 8, lines 27-42) a first video signal from a pre-recorded video source, the first video signal including a keying signal; receiving (a video camera 14 of Fig. 1, col. 5, lines 51-59) a second video signal from second video source; and replacing (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59, col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 8, lines

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27-42) the keying signal with the second video signal to generate a video signal comprising portions of the first video signal and the second video signal.

Regarding claim 26, Gurner et al discloses the claimed wherein the first video signal further comprises a prompting signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 27, Gurner et al discloses the claimed wherein the prompting signal includes at least one from a group comprising text, dimension indicators, and camera control signals (col. 9, line 14 to col. 10, line 24).

Regarding claim 29, Gurner et al discloses the claimed extracting a control signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 30, Gurner et al discloses the claimed the control signal is adapted to control the second video source (col. 9, line 14 to col. 10, line 24).

Regarding claim 31, Gurner et al discloses the claimed wherein the keying signal comprises one from a group comprising a chrominance signal, a luminance signal, and a color signal (col. 6, lines 6-18).

Regarding claim 32, Gurner et al discloses the claimed wherein the step of replacing further comprises reading a luminance signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and blocking at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the luminance signal being greater than or equal to a predetermined value (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 33, Gurner et al discloses the claimed wherein the step of replacing further comprises reading a luminance signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and passing at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the luminance signal being greater than or equal to a predetermined value (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 36, Gurner et al discloses the claimed reading a chrominance signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and blocking at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the chrominance signal being greater than or equal to a predetermined value (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 37, Gurner et al discloses the claimed reading a chrominance signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and passing at least a portion of the first video signal and blocking at least a portion of the second video signal in response to a value of the chrominance signal being greater than or equal to a predetermined value (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 40, Gurner et al discloses the claimed identifying the keying signal in the first video signal prior to replacing the keying signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 41, Gurner et al discloses a method of producing a video recording having a first video signal for use with mixing another video signal (Fig. 1) the method comprising:

capturing on a storage medium the first video signal from a first video source (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67);

identifying a portion of the video signal for later overlay by a portion of an unkeyed second video signal from a second video source (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67);

keying the identified portion of the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and

recording the captured and keyed first video signal on a recording medium (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 42, Gurner et al discloses the claimed wherein the keying the identified portion of the first video signal step further comprises the step of saturating a pre-determined color of the identified portion of the first video signal (col. 6, lines 6-17).

Regarding claim 43, Gurner et al discloses the claimed wherein the keying the identified portion of the first video signal step further comprises the step of altering a luminance level of the identified portion of the first video signal (col. 6, lines 6-17).

Regarding claim 44, Gurner et al discloses the claimed wherein the video signal includes a prompting channel (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 45, Gurner et al discloses the claimed providing a prompting signal in the prompting channel for providing one from a group comprising on-screen text prompts and control signals (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 47, Gurner et al discloses the claimed wherein the second video source is a camera configured to capture video signals (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 48, Gurner et al discloses the claimed wherein the camera configured to capture video signals captures live video signals (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 49, Gurner et al discloses the claimed transmitting the captured and keyed first video signal over one from a group comprising a communication network, a cable television network, and a satellite television network (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67)

Regarding claim 50, Gurner et al discloses the claimed wherein the first video signal comprises one from a group comprising educational video content, entertainment video content, and athletic video content (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 51, Gurner et al discloses a video playback device (Fig. 1) configured to provide video signals comprising a portion of a first video signal and a portion of a second video signal, the video playback device comprising a playback mechanism (source 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, and col. 8, lines 27-42) configured to play a pre-recorded video medium, the pre-recorded medium

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further comprising a pre-recorded video signal including a pre-keyed portion; and a mixer (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 27-42) coupled with the playback mechanism and configured to identify the pre-keyed portion of the pre-recorded video signal and configured to receive a second video signal from a video source, and configured to replace either the pre-keyed portion or a non-pre-keyed portion of the pre-recorded video signal with the second video signal to generate an output video signal.

Regarding claim 52, Gurner et al discloses the claimed an external port configured to couple with an external device for transmitting the output video signal (col. 7, lines 26-32).

Regarding claim 53, Gurner et al discloses the claimed wherein the external device comprises one from a group comprising a video monitor, a projection device, and a television (col. 7, lines 26-32).

Regarding claim 55, Gurner et al discloses the claimed wherein the video source comprises a camera for capturing video signals (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 56, Gurner et al discloses the claimed wherein the second video signal from the camera for capturing video signal comprises a live video signal (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 57, Gurner et al discloses the claimed wherein the mixer further comprises a switcher configured to detect the pre-keyed portions of the pre-recorded video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 58, Gurner et al discloses the claimed wherein the mixer further comprises a brightness enhancement circuit configured to enhance a brightness level of lowlights in the second video signal (col. 10, lines 5-24).

Regarding claim 59, Gurner et al discloses the claimed wherein the pre-recorded video signal further comprises a prompting channel (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 60, Gurner et al discloses the claimed wherein the prompting channel includes prompting signals (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 62, Gurner et al discloses the claimed wherein the mixer extracts control signals from the prompting channel for controlling an external device coupled with the mixer (col. 9, line 14 to col. 10, line 24).

Regarding claim 63, Gurner et al discloses the claimed wherein the external device comprises one from a group comprising a video monitor, a projection device, and a television (col. 7, lines 26-32).

Regarding claim 64, Gurner et al discloses the claimed wherein the mixer further comprises a time base control unit configured to receive the pre-recorded video signal and the second video signal and configured to synchronize the pre-recorded video signal and the second video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 65, Gurner et al discloses the claimed wherein the external port couples with one from a group comprising a video tape playback device, a video disk

playback device, a Compact Disc playback device, a DVD playback device, a solid state storage device, an optical storage device, and a magnetic storage device (col. 7, lines 50-52).

Regarding claim 66, Gurner et al discloses the claimed wherein the pre-recorded video signal comprises one from a group comprising a composite video signal, an S-video signal, a digital video signal, and an optical digital video signal (col. 6, lines 50-58).

Regarding claim 67, Gurner et al discloses the claimed wherein the pre-keyed portions of the pre-recorded video signal comprise one from a group comprising chroma-key portions and luminance key portions (col. 6, lines 6-17).

Regarding claim 68, Gurner et al discloses the claimed wherein the pre-recorded medium comprises a video source connected through a communication network (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 69, Gurner et al discloses an apparatus (Fig. 1) configured to combine video signals from a plurality of video sources, comprising an input (source 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, and col. 8, lines 27-42) configured to receive a first video signal from a pre-recorded video source and configured to receive a second video signal from a second video source, the first video signal including a keyed portion and a non-keyed portion; a mixer (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 27-42) coupled with the input and configured to replace either the keyed portion or the non-keyed portion with the second video signal to generate a synchronized video signal; and an output (video monitor 18 and speaker 36

of Fig. 1, col. 5, lines 51-59 and col. 8, lines 43-48) coupled with the mixed and configured to provide the synchronized video signal for an output device.

Regarding claim 70, Gurner et al discloses the claimed wherein the keyed portion is a background portion and the non-keyed portion is a foreground portion of the first video signal (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 71, Gurner et al discloses the claimed wherein the non-keyed portion is a background portion and the keyed portion is a foreground portion of the video signal (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 73, Gurner et al discloses the claimed wherein the second video source comprises a camera for capturing video (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 74, Gurner et al discloses the claimed wherein the second video signal comprises a live video signal from the camera for capturing video (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 75, Gurner et al discloses the claimed wherein the mixer further comprises a switcher (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19) configured to detect the non-keyed portion of the first video signal and configured to generate the synchronized video signal from the keyed portions of the first video signal and the second video signal.

Regarding claim 76, Gurner et al discloses the claimed wherein the mixer further comprises a switcher (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19) configured to detect the keyed portion of the first video signal and

configured to generate the synchronized video signal from the keyed portions of the first video signal and the second video signal.

Regarding claim 77, Gurner et al discloses wherein the mixer further comprises a brightness enhancement circuit configured to enhance a brightness level of lowlights in the second video signal (col. 10, lines 5-24).

Regarding claim 78, Gurner et al discloses the claimed wherein the first video signal further comprises a prompting channel (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 79, Gurner et al discloses the claimed wherein the prompting channel includes prompting signals (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 81, Gurner et al disclosed the claimed wherein the mixer extracts the control signals from the prompting channel for controlling an external device coupled with the mixer (col. 9, line 14 to col. 10, line 24).

Regarding claim 82, Gurner et al discloses the claimed wherein the external device comprises one from a group comprising a video monitor, a projection device, and a television (col. 7, lines 26-32).

Regarding claim 83, Gurner et al discloses the claimed wherein the mixer further comprises a time base control unit (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67) configured to receive the first video signal and the second video signal and configured to synchronize the first video signal and the second video signal.

Regarding claim 84, Gurner et al discloses the claimed wherein the output device comprises one from a group comprising a videotape device, a video disk device, a DVD device, a Compact Disc device, an optical storage device, a solid state storage device, and a magnetic storage device (col. 7, lines 50-52).

Regarding claim 85, Gurner et al discloses the claimed wherein the output device comprises one from a group comprising a video monitor, a projection device, and a television (col. 7, lines 26-32).

Regarding claim 86, Gurner et al discloses the claimed wherein the first video signal comprises one from a group comprising a composite video signal, an S-video signal, a digital video signal, and an optical digital video signal (col. 6, lines 50-58).

Regarding claim 87, Gurner et al discloses the claimed wherein the pre-keyed portions comprise one from a group comprising chroma-key portions and luminance key portions (col. 6, lines 6-17).

Regarding claim 88, Gurner et al discloses the claimed wherein the keyed portion of the first video signal comprises a luminance key portion (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 89, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal comprises a chroma-key portion (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 90, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal comprises a luminance key portion (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 91, Gurner et al discloses a method (Fig. 1) for combining video signals from a plurality of video signal sources, comprising:

receiving (source 12 video camera 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 8, lines 27-42) a first video signal from a pre-recorded video source, the first video signal further comprising a keyed portion and a non-keyed portion;

receiving (a video camera 14 of Fig. 1, col. 5, lines 51-59) a second video signal from second video source; and

replacing (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59, col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 8, lines 27-42) either the keyed portion or the non-keyed portion of the first video signal with the second video signal to generate a third video signal comprising portions of the first video signal and the second video signal.

Regarding claim 92, Gurner et al discloses the claimed wherein the first video signal further comprises a prompting signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 93, Gurner et al discloses the claimed wherein the prompting signal includes at least one from a group comprising text, dimension indicators, and camera control signals (col. 9, line 14 to col. 10, line 24).

Regarding claim 95, Gurner et al discloses the claimed extracting a control signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 96, Gurner et al discloses the claimed wherein the control signal is adapted to control the second video source (col. 9, line 14 to col. 10, line 24).

Regarding claim 97, Gurner et al discloses the claimed wherein the keyed portion of the first video signal comprises a background portion (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 98, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal comprises a background portion (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 99, Gurner et al discloses the claimed wherein the keyed portion of the first video signal comprises a foreground portion (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 100, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal comprises a foreground portion (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 101, Gurner et al discloses the claimed wherein the keyed portion of the first video signal is a chrominance signal (col. 6, lines 6-17).

Regarding claim 102, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal is a chrominance signal (col. 6, lines 6-17).

Regarding claim 103, Gurner et al discloses the claimed wherein the keyed portion of the first video signal is a luminance signal (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 104, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal is a luminance signal (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 105, Gurner et al discloses the claimed reading a luminance signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and blocking at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the luminance signal being greater than or equal to a predetermined value (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 108, Gurner et al discloses the claimed reading a chrominance signal from the first video signal (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and blocking at least a portion of the first video signal and passing at least a portion of the second video signal in response to a value of the chrominance signal being greater than or equal to a predetermined value (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 112, Gurner et al discloses the claimed wherein the second video source comprises a video camera (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 113, Gurner et al discloses the claimed wherein the third video signal comprises an output video signal (col. 7, lines 26-32).

Regarding claim 114, Gurner et al discloses the claimed supplying the output video to an output device (col. 7, lines 26-32).

Regarding claim 115, Gurner et al discloses the claimed wherein the output device comprises one form a group of a visual display device and a data signal storage device (col. 7, lines 26-32 and 50-52).

Regarding claim 116, Gurner et al discloses the claimed wherein the first video source comprises a computing device connected through a communication network (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 117, Gurner et al discloses an apparatus (Fig. 1) configured to generate a synchronized video signal from a plurality of video signals, comprising:

an input means (source 12 of Fig. 1, col. 5, lines 51-59, col. 6, lines 50-58, and col. 8, lines 27-42) for receiving a first video signal from a means for storing and for receiving a second video signal from a means for capturing video, the first video signal including a keyed portion and a non-keyed portion; a mixing means (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 27-42) coupled with the input means for replacing either the keyed portion or the non-keyed portion with the second video signal for generating a synchronized video signal; and an output means (video monitor 18 and speaker 36 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 43-48) coupled with the mixing means for outputting the synchronized video signal to an output device.

Regarding claim 118, Gurner et al discloses the claimed wherein the keyed portion is a background portion and the non-keyed portion is a foreground portion of the first video signal (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 119, Gurner et al discloses the claimed wherein the non-keyed portion is a background portion and the keyed portion is a foreground portion of the video signal (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19).

Regarding claim 121, Gurner et al discloses the claimed wherein the means for capturing video comprises a second video source (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 122, Gurner et al discloses the claimed wherein the second video signal comprises a live video signal from the second video source (a video camera 14 of Fig. 1, col. 5, lines 51-59).

Regarding claim 123, Gurner et al discloses the claimed wherein the means for mixing further comprises a means (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19) for detecting the non-keyed portion of the first video signal and a means for generating the synchronized video signal from the non-keyed portions of the first video signal and the second video signal.

Regarding claim 124, Gurner et al discloses the claimed wherein the means for mixing further comprises means (col. 5, line 60 to col. 6, line 18, col. 6, lines 59-67, and col. 11, lines 10-19) for detecting the keyed portion of the first video signal and a means for generating the synchronized video signal from the keyed portions of the first video signal and the second video signal.

Regarding claim 125, Gurner et al discloses wherein the means for mixing further comprises a means for enhancing a brightness level of lowlights in the second video signal (col. 10, lines 5-24).

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Regarding claim 126, Gurner et al discloses the claimed wherein the first video signal further comprises a prompting channel (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 127, Gurner et al discloses the claimed wherein the prompting channel includes prompting signals (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

Regarding claim 129, Gurner et al disclosed the claimed wherein the means for mixing further comprises a means for extracting the control signals form the prompting channel for controlling an external device (col. 9, line 14 to col. 10, line 24).

Regarding claim 130, Gurner et al discloses the claimed wherein the external device comprises one from a group comprising a video monitor, a projection device, and a television (col. 7, lines 26-32).

Regarding claim 131, Gurner et al discloses the claimed wherein the output device comprises one from a group comprising a videotape device, a video disk device, a DVD device, a Compact Disc device, an optical storage device, a solid state storage device, and a magnetic storage device (col. 7, lines 50-52).

Regarding claim 132, Gurner et al discloses the claimed wherein the output device comprises one from a group comprising a video monitor, a projection device, and a television (col. 7, lines 26-32).

Regarding claim 133, Gurner et al discloses the claimed wherein the first video signal comprises one from a group comprising a composite video signal, an S-video signal, a digital video signal, and an optical digital video signal (col. 6, lines 50-58).

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Regarding claim 134, Gurner et al discloses the claimed wherein the keyed portion of the first video signal comprises a chroma-key (col. 6, lines 6-17).

Regarding claim 135, Gurner et al discloses the claimed wherein the keyed portion of the first video signal comprises a luminance key portion (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 136, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal comprises a chroma-key portion (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 137, Gurner et al discloses the claimed wherein the non-keyed portion of the first video signal comprises a luminance key portion (col. 1, lines 15-23 and col. 6, lines 6-17).

Regarding claim 138, Gurner et al discloses the claimed wherein the means for mixing comprises a mixer (mixer 16 and audio mixer 34 of Fig. 1, col. 5, lines 51-59 and col. 8, lines 27-42).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 6, 28, 94, and 128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurner et al ('537) in view of Block et al ('105).

Regarding claim 2, Gurner et al discloses all the features of the instant invention as discussed in claim 1 above except for providing that the control signals include user prompts displayed on the production monitor but absent from the combined video output.

Block et al teaches in a video recording system that , also appearing in window 15, i.e. in the booth monitor 37, will be any text which is encoded on the videodisc and sent to the character generator 47, such as prompting and cues, but which may or may not be recorded onto the videotape 55 or other recording medium so that the user can interactively control the video booth (col. 5, lines 37-56).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the displayed prompting and cues as taught by Block et al into Gurner et al's system in order to increase the flexibility of the system of Gurner et al by allowing the user to interactively controlling the video apparatus of Gurner et al.

Regarding claim 6, Block et al also teaches the claimed wherein the data in the prompting channel is translatable into video data optionally overlayable on video data from said video channel (col. 5, lines 37-56).

Regarding claim 28, Block et al discloses the claimed generating screen prompts from the prompting signal (col. 5, lines 37-56).

Claim 94 is rejected for the same reasons as discussed in claim 28 above.

Regarding claim 128, Block et al discloses the claimed a means for extracting text from the prompting signal for display on the output device (col. 5, lines 37-56).

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9. Claims 9, 46, 54, 72, 111, and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurner et al (537).

Regarding claim 9, Gurner et al discloses all the features of the instant invention as discussed in claim 8 above except for that the first video source comprises one from a group comprising a videotape, a video disk, a DVD, a Compact Disc, and optical storage medium, a solid state storage medium, and a magnetic storage medium.

Gurner et al teaches in col. 6, lines 50-58 the first video source (source 12) is a storage medium which stores one or more pre-mixed foreground clips. The storage means may be of any type, and may store the clips in any conventional video format. Typically, best results are obtained by employing digital formats, although analogue implementations also fall within the scope of the present invention.

Gurner et al also teaches in col. 7, lines 50-52 that the output media recorder 20 may be any type of video recording apparatus including, but not limited to, a video tape recorder, laser disk system or a digital video disk (DVD) system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the well known video tape recorder, laser disk system or digital video disk system as taught by Gurner et al for the video source 12 of Gurner et al since it merely amounts to selecting an alternative equivalent storage device and because Gurner teaches that the video source 12 can be any type of storage device.

Claim 46 is rejected for the same reasons as discussed in claim 9 above.

Claim 54 is rejected for the same reasons as discussed in claim 9 above.

Claim 72 is rejected for the same reasons as discussed in claim 9 above.

Claim 111 is rejected for the same reasons as discussed in claim 9 above.

Claim 120 is rejected for the same reasons as discussed in claim 9 above.

10. Claims 16, 34-35, 38-39, 61, 80, 106-107, and 109-110 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gurner et al ('537) in view of Block et al ('105) and further in view of Yamashita et al ('113).

Regarding claim 16, the proposed combination of Gurner et al and Block et al as discussed in claim 2 above discloses all the features of the instant invention except for providing a closed caption decoder.

Yamashita et al teaches in col. 14, lines 56-61 that it is possible to compose a picture as illustrated in FIGS. 15A through 15C, in which a caption, a musical score, or an explanation of a scene, etc (prompting signal), obtained from the subcode is inserted into a moving picture obtained by the video format signal recorded in the video area so that the visibility of superimposed characters can be improved (col. 5, lines 11-15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the closed caption decoder as taught by Yamashita et al into the combination of Gurner et al and Block et al in order to improve the invisibility of superimposed characters as taught by Yamashita et al.

Claim 34 is rejected for the same reasons as discussed in claim 16 above.

Regarding claim 35, Gurner et al discloses the claimed passing the data to a processing system (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67); and generating control signals from the data (col. 5, line 60 to col. 6, line 18 and col. 6, lines 59-67).

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Claim 38 is rejected for the same reasons as discussed in claim 16 above.

Claim 39 is rejected for the same reasons as discussed in claim 35 above.

Claim 61 is rejected for the same reasons as discussed in claim 16 above.

Claim 80 is rejected for the same reasons as discussed in claim 16 above.

Claim 106 is rejected for the same reasons as discussed in claim 16 above.

Claim 107 is rejected for the same reasons as discussed in claim 35 above.

Claim 109 is rejected for the same reasons as discussed in claim 16 above.

Claim 110 is rejected for the same reasons as discussed in claim 35 above.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

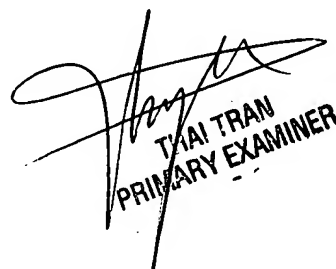
The cited references relate to an apparatus for editing video signal.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (703) 305-4725.

The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


THAI TRAN
PRIMARY EXAMINER